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Directly under its administration are the chief telegraph offices in Vienna, Graz, Innsbruck, Linz and Klagenfurt. After the union of the Burgenland (Western Hungary) with the Republic of Austria according to the Peace Treaty of St. Germain, a further chief telegraph office in Ödenburg will be added.

Next follow the independent telegraph and telephone offices. In Vienna there exists a central telegraph station with 36 simple Hughes apparatus, 40 Hughes duplex apparatus, 4 double-fold Baudot apparatus, 3 twofold Baudot apparatus, 7 Siemens telegraph apparatus (Duplex), etc.

Besides, there are in Vienna and the provinces seventy-six independent telegraph offices. The whole net of wire includes cables of the length of 48,000 kilometers, covering distances of 18,000 kilometers. The telephone communication is administrated by thirty-three independent telephone offices including 79,467 main partners and 40,054 secondary partners.

Altogether, 11,500 persons belong to

the telegraph and telephone administration, of whom 500 are in the administering and in the building service.

#### AERIAL NAVIGATION

The state of aerial navigation in Austria has been determined by the Treaty of St. Germain. According to the terms of this treaty, all army aeronautic material, airships, motors, hangars, balloons and so on, had to be delivered to the Allied and Associated Powers and those not ordered for foreign transport, destroyed.

Since Austria had no private airships, her aeronautic activity is at present at a standstill. Its renewal will be possible only after the removal of the prohibition to build, to import or to export airships and their parts. The Paris Conference of the Allied Powers is willing to give to the Austrian government hangars and other aeronautic equipment for the supply of four aviation fields, Aspern, near Vienna, Thalerhof, near Graz, Klagenfurt and Innsbruck.

## CHAPTER IX

### The Manufactures of the Republic of Austria

By DR. SIEGMUND SCHILDER

Secretary of the Commercial Museum of Vienna and Privatdocent at the University of Vienna

**I**N those provinces which in November, 1918, united to form the state of German Austria, the later Republic of Austria, there existed all sorts of manufactures in pre-war times, which continued even through the war. Simple handicrafts and repairing work were to be found in both town and country, beside gigantic industrial concerns, such as the Österreichische Alpine Montangesellschaft with its mines,

iron forges and iron industries in Northern Styria and Carinthia; the Aktiengesellschaft Krupp at Berndorf for the manufacture of manifold objects of base metals; the Steyrer Waffen und Kraftwagenfabrik, arms and motor-car industry; the Puchschon Fahrradwerke, motorcycle works in Graz; the Lokomotivfabrik in Wiener Neustadt; the two railway carriage factories in Vienna and Graz; the

Vöslauer Kammgarnspinnerei, long wool spinning mills, and the large breweries at Schwechat, near Vienna, and at Puntigam, near Graz.

During war-timesome of these industries such as the metal and chemical factories, leather and shoe industries, were particularly flourishing inasmuch as they had to supply military requirements and were not totally cut off from the supply of raw materials. During the War, also, several state enterprises were added to private manufactures. These state enterprises were partly new projects and partly enlargements, like the Arsenal in Vienna, the ammunition works in Wöllersdorf and Blumau, etc.

Between the two extremes, *i.e.*, between handicrafts and the great manufactures, were large numbers of various factories of medium size. The War put an end to many of these smaller concerns either through their managers' being called to arms, or through want of raw materials; on the other hand, if their directors happened to be exempt from military service, or if the concern itself could be managed by women and did not lack raw materials, many of these medium sized manufacturers flourished as never before.

#### EFFECTS OF THE TREATY OF ST. GERMAIN

During the War established conditions underwent a great change which manifested itself in the adaptation of factories to the production of war requirements, in the lack of raw materials, in government prohibition on the manufacture of luxuries, etc. Then, after the War, the distribution of old Austria among the Succession States by the terms of the Treaty of St. Germain, in many cases had a detrimental effect on the industries remaining in the Republic of Austria. For example, sufficient spinning mills and

finishing works but by far too few looms are at disposal of the textile manufactures. The tanneries lack the supply of skins and tanning materials from the agricultural and forest districts of former Austria-Hungary. The important iron mines and smelting works in the Austrian Alpine provinces miss the necessary coal supply from the mining districts, which now belong to Czecho-Slovakia.

Still another effect of the treaty made itself disagreeably felt: namely, the fact that many of the great manufactures had always had their seats in Vienna but their factories, mines, etc., in those parts of former Austria-Hungary at present belonging to Czecho-Slovakia, Poland, Rumania, Jugo-Slavia or Italy. In these outlying districts, as it happened, circumstances in pre-war times afforded better prospects for industrial work: an abundance of raw materials, semi-manufactured goods and fuel; favorable lines of communication for export trade; moderate wages; low land prices and rents; occasionally, also, a lower taxation. Very often, indeed, only the commercial managements had their seat in Vienna.

#### MANUFACTURE OF LUXURIES IN VIENNA

The disadvantages of the breaking-up of the former great Austro-Hungarian economic and customs unit were less felt by the manufactures of luxuries and objects of art in Vienna. Here at the Capital, such manufactures derived certain advantages from the general conditions in the great metropolis which were to be found scarcely elsewhere within Austria-Hungary; *i.e.*, an innate and refined taste, a special skill in arts and crafts, surroundings encouraging such faculties and talents and comparatively wealthy and pleasure-seeking customers. Vienna, in consequence, has been able to develop

art objects to compare with the well known articles of Paris. In Vienna such products go by the name of fancy goods (*Galanteriewaren*) and comprise a great number of objects for daily use and ornaments made of the most varied materials.

Beside fancy goods made of leather, trunk articles, and saddler's wares, these are knick-knacks, smoker's requisites, stationery, articles for office use, cutlery, decorative buttons, lamps and candlesticks, high class toys, turned and carved objects made of ivory, mother of pearl, tortoise shell, horn, *gabalith* celluloid, soap-stone, marble, fine wood and base metals (especially bronze and other alloys of tin, zinc, nickel and copper) including wrought iron. The objects of art made of silver, gold and platinum rank with the jewelry and church vessels for the fabrication of which Vienna has long been renowned. Another group of art objects is formed by art fabrics and clothes, elegant gowns and underwear for ladies and children, carpets, fancy shoes, furs, feathers for trimming and artificial flowers, felt hats and art needle-work on cambric.

We must further enumerate among the manufacture of luxuries at Vienna, musical instruments (especially pianos), billiard tables, fancy stationery, more particularly notepaper, envelopes, albums, visiting cards, view-cards, pictures and engravings, maps, wicker articles, high class furniture, and the products of the film manufactures, which have gained much importance because of the possibilities for exportation after the War. For the rest, manufactures of luxuries are also to be found outside of Vienna in other cities of the Republic of Austria, as for instance, stained glass at Innsbruck, potteries in Upper-Austria (Salzkammergut), wood carvings in a number of the Alpine districts, etc.

Another consequence of the new demarcation of Austria was frequently observed in certain branches of industrial life which in the times of the old dual monarchy worked chiefly for home markets in a rather lax manner encouraged by protectionism. These manufactures were suddenly turned into export industries, within the narrowed customs and economic boundaries of the Austrian Republic. It is true that for some of these industries adaptation to new conditions was facilitated by the fact that the rate of exchange of the Austrian krone in foreign countries dropped faster than the wages and other working costs of the industries went up in Austria.

#### FOREIGN AID TO MANUFACTURES

In many instances not a few foreign firms were induced to avail themselves of the Austrian industries for the finishing up of various raw materials and semi-manufactured goods. For instance, German publishers made use of Austrian printing offices; Swiss packers, of the slaughter houses in the Austrian province of Vorarlberg. In the chapter on "Customs Policy," is given a more detailed description of this finishing up trade and of the means employed by the government to encourage it with the help of the customs and credit policy.

Besides, Austrian manufactures were allowed to profit by the short reconstruction boom, which set in immediately after the Armistice and ended in the spring of 1920 to make room for an international economic crisis.

Austrian industry was the more in need of such aid as it had to labor under a number of very unfavorable conditions. In the first instance, we must mention the lack of raw material, semi-manufactured goods and fuel. This, again, would seem a consequence of other grievances, especially the

limiting of the Republic of Austria to a territory but moderately rich in natural resources and the political isolation of Austria, caused by the policy of the other Succession States, particularly of Czecho-Slovakia. It should not be overlooked, either, that the rapid depreciation of the currency increased the purchasing power of foreign countries in Austrian markets and the consequent possibilities of selling Austrian products, while the purchasing power of Austrian manufacturers for foreign raw materials and semi-manufactured goods was sensibly diminished.

#### THE COAL SHORTAGE

The shortage of coal was particularly felt by those manufactures that use coal as an integral part of their products, *i.e.*, productions of calcium carbide, or employ it in comparatively large quantities as in iron mills, in brick and cement yards (where coal shortage meant stoppage in the building trade), in other branches of metallurgy, in the calcination of magnesite, etc. For almost a year past, mutual compensation treaties with foreign countries have brought some relief, for example, the exchange of Austrian cement in Jugo-Slavia for the requirements of iron works ever since the penetration of the German Stinnes concern into the Alpine Montangesellschaft. For business reasons the hauling of iron ore in the Austrian Alpine provinces was limited to the two most easily excavated *Erzberge* (one between Eisenerz and Vordernberg in Northern Styria, the other at Hüttenberg in Carinthia) by the Alpine Montangesellschaft, the most prominent of the Austrian iron foundries, although in other parts of the Austrian Republic important beds of coal are to be found. Beside the Alpine Montangesellschaft, must be mentioned the smaller iron foundries that have gained renown

throughout the world for their first quality steel.

The output of iron ore amounted to two million tons in the last years before the War but has since declined because of the generally unfavorable conditions of the Austrian Republic. The same is true in a comparatively smaller degree of the production of pig iron, which sank from 607,000 tons in 1913 to 110,000 tons in 1920, and, in 1919, even to 55,000 tons. In this extremity, numerous hardware factories were forced to import semi-manufactured goods from Czecho-Slovakia and especially from Germany. This was the case with the very capable machine works making industrial and agricultural machines, the works engaged in the production of rolling stock, railway and building materials, the motor-car and bicycle factories, the ship-building yards on the Danube, the manufactures of cutlery, scythes, sickles, etc.

The Austrian industries were forced to adapt themselves to all these unfavorable conditions. Apart from the fancy goods industries, the scarcity and high price of raw materials, semi-manufactured goods and fuel limited the manufactures to the production of articles in which the value of raw material and semi-manufactured goods falls short of the value of the labor involved. So instead of leather, leather shoes were exported; instead of any fabrics, clothing and underwear; instead of semi-manufactured paper, paper itself or rather paper-goods, stationery, prints, etc.

#### DOMESTIC ENCOURAGEMENT

But Austria found a way out of those difficulties not only by making use of capital and labor in production of high class workmanship, but by giving preference to those branches of industries for which the raw materials

were, for the greater part, to be procured at home and to which the problem of fuel presented no great difficulties. Here it is well to mention the greatest natural resource (some deposits of useful minerals excepted) of which the Austrian Republic can boast—namely, her forests. These cover 2.95 million hectare (about 7 million acres) and yield about 4.6 million cubic metres of wood, over 95 per cent soft wood. The manufacture of wooden articles in Austria comprises all sorts of wares from the simplest sawed and rough hewed goods to the finest wooden fancy articles and carvings. There are, in addition, planed woods, veneer and timber, common and select furniture, kitchen furniture, wooden parts of tools and machinery, toys made of wood, etc. Wood is further of great importance to the Austrian Republic as the raw material for the production of paper and paper goods. All this forms an integral part of the industrial activity within the narrowed boundaries of the Republic of Austria.

#### MINERALS OF AUSTRIA

Ranging far behind wood with its manifold uses and the iron industries must be named the three principal mineral raw materials of the Republic of Austria, magnesite, graphite and talcum. Magnesite is principally used as a raw material in iron foundries. In consequence of various difficulties, the almost inexhaustible deposits in the Austrian Alpine provinces (especially in Veitsch and further at Kraubath, both deposits in Northern Styria) yielded an output of only 9,971 tons raw magnesite and 52,560 tons calcinated magnesite for export in 1920. At present Germany is the principal buyer of magnesite, a capacity in which the United States had appeared before the war.

Graphite is found in Styria (particularly near Mautern-St. Michael) of a hard non-sulphurous kind which is principally used to make crucibles for casting steel. Besides, there are smaller deposits of graphite in the North West of Lower Austria (up to Spitz on the Danube) as continuations of the South Bohemian graphite deposits. The production of the last year of peace, 1913, within the territory of the present Republic of Austria amounted to 17,282 tons and far exceeded the home requirements, which, it is true, are dependent on foreign countries for some special grades. In 1920, the production of the Austrian Republic amounted to only 11,500 tons.

Talcum is to be found in several places in the Alpine provinces but in especially large quantities and very good quality at Mautern (Northern Styria). Immediately before the War its output amounted to not quite 15,000 tons yearly. It is not only used for home demand in Austrian industries, but is also to a great extent refined for export according to the various manners of its employment in powders, paints, tooth-paste, as filling material in the paper industry, finishing material in the textile industry, as non-lubricating and polishing material free from fat in numerous industries such as potteries and the glass industry, etc.

Not only are the sources of old, well-known raw material energetically exploited in Austria but attempts are made to discover new ones or to utilize others, neglected or less known up to the present. Apart from endeavors, dating back to war-time, thoroughly to investigate the nature and usefulness of the abundant and manifold plants of economic value found in the Austrian Alpine districts, interest has chiefly centered in the mineral resources. It has for instance been

possible since the autumn of 1920 to become independent of the supply of North Bohemian caoline by the discovery of quite a good quality of this material in Upper Austria and so to lay a foundation for china manufacture in the Austrian Republic.

The fabrication of aluminum conducted with the help of the Alpine water powers has suffered very severely from the lack of the raw material, *bauxit*, ever since the collapse of the Monarchy in the autumn of 1918. Diligent mineralogical and geological research succeeded in discovering this mineral in Upper Austria and Salzburg and in stimulating a new development of the aluminum industry.

The gold mining which was carried on in the Alpine provinces, especially in Salzburg, to a comparatively large extent in the fifteenth and sixteenth centuries fell into disuse later on, owing partly to the unfavorable natural causes, descent of glaciers, and partly to the expulsion of the Protestant miners. But in the course of the last year gold mining has again been taken up with greater zeal as a good capital investment and met with some success, especially in the territories of Gastein and Rauris.

The coal output which still remains short of the demand has been raised on the one hand by the exploitation of coal mines neglected till now, and on the other hand by more intense exploitation of the deposits already worked which already show an increase of from not quite two million tons in 1919 to about two and one-half million tons in 1920. It is true

that for the greatest part brown coal is hauled. The oil slate (*Ölschiefer*) deposits in Northern-Tirol which had already been exploited on a moderate scale for some time have been worked more intensively ever since the summer of 1920. They are to furnish the raw material for some chemical works.

#### NATIONALIZATION

During the first two years of the Republic of Austria while the Social Democratic party played an important, and sometimes even a leading part in the government, eager attempts were made to create industries on the basis of nationalization (*Gemeinwirtschaft*) or as half private enterprises. Some municipalities of larger towns that are in the hands of the Social Democratic party, Vienna, Wiener Neustadt, Graz, etc., have pursued this line of action since the autumn of 1920 and the same may be said of the organizations of consumers in town and countryside, coöperative societies and agricultural purchasing societies. They are tackling the problems of the exploitation of the water powers, electric plants, coal mines, mills, bakeries, the production of medicines, the procuring of agricultural implements and machinery, seeds and sundry other agricultural requirements, the shoe industries, the manufacture of saddles, leather goods and the weaving and making up of textiles, etc.

But none of these attempts have so far been so greatly successful as materially to discredit the old established system of free capitalistic initiative.